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09/934,626	08/22/2001	John M. Baron	10010923	8671

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EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/934,626

Applicant(s)

BARON ET AL.

Examiner

Justin P. Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 4, 6 - 15, 17, 19 - 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 6 - 15, 17, 19 - 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed February 9, 2006 have been fully considered but they are not persuasive.
2. Applicant argues, "Pavley does not disclose, 'a processor ... configured to disable image capture if said memory is full and said memory does contain any archived images.'" Applicant additionally argues, "nowhere does Pavley disclose disabling image capture."
3. The Examiner generally agrees with Applicant that Pavley does not actually state, "disabling image capture"; however, Applicant's above arguments cannot be concluded.
4. As was inferred in the Office Action (page 4), "Pavley leaves no choice but to disable image capture if the local storage system indicates that more storage space is needed to store the newly formed image file when there are no image files that can be safely deleted from the local storage system (e.g. archived images)." The Examiner maintains this position.
5. In column 5 (line 67) – column 6 (line 7), Pavley teaches "when an attempt to take an image results in an indication that more storage space is needed, a storage rule set may be initiated to reclaim enough storage space to take an image ... The storage rule set may be based on deleting image files from memory that have an archive file attribute indicates that the image file exists in a backup form elsewhere, such as on desktop system 1100." Furthermore, in column 5 (lines 42 – 45) and column 6 (lines 27 – 33), Pavley teaches "an image files is capable of including one or more of the file attribute designations" and "the system 1100 determines whether an archive attribute is set for an image file."

6. Based upon these teachings in Pavley, it is clear that only *archived images* can be deleted to free storage space and a portion of the total stored images may be designated as *archived*. In other words, Pavley teaches that it not necessary to designate every stored image as *archived*; however, the only way to reclaim storage space is by deleting *archived* images. Furthermore, the Examiner notes Pavley does not disclose an alternative location or method to store captured images.

7. Therefore, as stated in the Office Action, Pavley leaves no choice but to disable image capture. In response to Applicant's arguments, although not actually stated, disabling image capture is an inherent feature within Pavley.

8. For these reasons, the rejection of Claim 1 is sustained. According to Applicant, the remarks regarding Claim 1 equally apply to independent Claims 9 and 13. The Examiner has successfully traversed Applicant's arguments regarding Claim 1; hence, Applicant's arguments for Claims 9 and 13 are equally traversed. Additionally, Applicant's arguments for dependent Claims 2 – 8, 10 – 12, and 14 – 20 are moot by virtue of their dependency upon independent Claims 1, 9, and 13.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 1, 2, 4, 7 – 10, 12 – 15, 17, 20, and 21** are rejected under 35 U.S.C. 102(e) as being anticipated by Pavley.

11. For **Claim 1**, Pavley disclose, as shown in figures 1 and 4 – 7 and as stated in column 5 (line 25) – column 6 (line 42), an image capturing device (figure 1), comprising:

a processor (110);

at least one interface (348) communicating with said processor (110) and capable of transferring images out of said image capturing device (see figure 6 and column 2, lines 64 – 67, column 5, lines 46 – 60, and column 6, lines 10 – 15);

a memory (354) communicating with said processor (110) and capable of storing a plurality of records (“image files”), with a record including image data (810) and image status data (825; see figures 4 and 5) indicating whether a copy of the image has been transferred out of the device (“file attributes”; see column 5, lines 30 – 45);

wherein said processor (110) is configured to determine whether said memory (354) includes any archived images as indicated by said status data (“file attributes”) and is configured to replace one or more archived images in said memory (354) with a newly captured image when insufficient free space exists in said memory (354) to store said newly captured image (Pavley explicitly recites this feature in column 5, line 67 – column 6, line 10); and

wherein said processor (110) configured to disable image capture if said memory is full and said memory does not contain any archived images (see explanation below).

In column 5 (lines 39 – 41), Pavley indicates that only image files that have been archived (“undergone a backup process”) can be safely deleted from the local storage system. Furthermore, in column 5 (line 67) – column 6 (line 7), Pavley also teaches that when an attempt

to take an image results in an indication that more storage space is needed, archived images may be deleted to reclaim enough storage space to take an image. Finally, in column 5 (lines 42 – 45) and in column 6 (lines 27 – 33), Pavley indicates that an image file is capable of including an archive file attribute but does not necessarily include an archive file attribute and that an archiving operation may be set up and selected in the camera but not necessarily set up and selected.

Hence, Pavley does not have a specific requirement to archive image files; albeit, image files which have not been archived cannot be deleted. Furthermore, Pavley specifically indicated that images are only taken when there is enough storage space to store a newly captured image. Therefore, Pavley leaves no choice but to disable image capture if the local storage system indicates that more storage space is needed to store the newly formed image file when there are no image files that can be safely deleted from the local storage system (e.g. archived images).

12. As for **Claim 2**, Pavley discloses, as shown figure 6 and columns 2 (lines 64 – 67), 5 (lines 46 – 60), and 6 (lines 10 – 15), wherein said at least one interface (348) is a communication interface capable of transmitting a stored image to an external device (1100/1102).

13. As for **Claim 4**, Pavley discloses, as shown figure 6 and columns 2 (lines 64 – 67), 5 (lines 46 – 60), and 6 (lines 10 – 15), wherein said at least one interface (348) is a removable memory medium interface capable of transmitting a stored image (stored in DRAM 346) to a removable memory medium (354).

14. As for **Claim 7**, Pavley discloses, as shown in figures 1, 2A, and 2B, wherein said memory (354) is an internal memory. In other words, figures 2A and 2B show that the

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removable memory medium (354) is completely housed within the camera; hence, it is an internal memory. The claim language does not specify whether the internal memory is a permanent or removable internal memory.

15. As for **Claim 8**, Pavley discloses, as stated in column 3 (lines 7 – 11), wherein said memory (354) comprises a removable memory medium (354).

16. For **Claim 9**, Pavley discloses, as shown in figures 4 – 7 and as stated in column 5 (line 25) – column 6 (line 42), a memory management method for a memory (“local storage space”) of an image capturing device (“digital camera 110”), comprising the steps of:

transferring a copy of an image out of said memory (“local storage space”) during an image archiving operation (column 6, lines 10 – 17);

marking said image in said memory as an archived image (see column 5, lines 39 – 41);  
and

automatically replacing an archived image with a newly captured image if said memory lacks sufficient free space to store said newly captured image (see column 5, line 61 – column 6, line 9)

automatically disabling image capture if said memory is full and said memory does not contain any archived images (see explanation below).

In column 5 (lines 39 – 41), Pavley indicates that only image files that have been archived (“undergone a backup process”) can be safely deleted from the local storage system. Furthermore, in column 5 (line 67) – column 6 (line 7), Pavley also teaches that when an attempt to take an image results in an indication that more storage space is needed, archived images may be deleted to reclaim enough storage space to take an image. Finally, in column 5 (lines 42 – 45)

and in column 6 (lines 27 – 33), Pavley indicates that an image file is capable of including an archive file attribute but does not necessarily include an archive file attribute and that an archiving operation may be set up and selected in the camera but not necessarily set up and selected.

Hence, Pavley does not have a specific requirement to archive image files; albeit, image files which have not been archived cannot be deleted. Furthermore, Pavley specifically indicated that images are only taken when there is enough storage space to store a newly captured image. Therefore, Pavley leaves no choice but to disable image capture if the local storage system indicates that more storage space is needed to store the newly formed image file when there are no image files that can be safely deleted from the local storage system (e.g. archived images).

17. As for **Claim 10**, Pavley discloses, as stated in column 6 (lines 10 – 17), wherein the transferring step comprises transferring said copy to an external computer device (1100).

18. As for **Claim 12**, Pavley discloses, as shown in figure 5 and as stated in column 5 (lines 25 – 45), wherein the marking step comprises changing a status variable in an associated status storage cell (file attribute designations of file tags) to an archived state.

19. For **Claim 13**, Pavley discloses, as shown in figures 4 – 7 and as stated in column 5 (line 25) – column 6 (line 42), a memory management method for a memory (“local storage space”) of an image capturing device (“digital camera 110”), comprising the steps of:

determining whether said memory is capable of storing an additional image (see column 5, line 67 – column 6, line 10);

storing a captured image in said memory if sufficient free space exists in said memory (again see column 5, line 67 – column 6, line 10);



determining if said memory contains at least one archived image, if said memory is not capable of storing said captured image (once again see column 5, line 67 – column 6, line 10), and

replacing said at least one archived image with said captured image if said memory is not capable of storing said captured image and if said memory contains said at least one archived image (finally again see column 5, line 67 – column 6, line 10),

wherein an image capture is disabled if said memory is full and said memory does not contain any archived images (see explanation below).

In column 5 (lines 39 – 41), Pavley indicates that only image files that have been archived (“undergone a backup process”) can be safely deleted from the local storage system. Furthermore, in column 5 (line 67) – column 6 (line 7), Pavley also teaches that when an attempt to take an image results in an indication that more storage space is needed, archived images may be deleted to reclaim enough storage space to take an image. Finally, in column 5 (lines 42 – 45) and in column 6 (lines 27 – 33), Pavley indicates that an image file is capable of including an archive file attribute but does not necessarily include an archive file attribute and that an archiving operation may be set up and selected in the camera but not necessarily set up and selected.

Hence, Pavley does not have a specific requirement to archive image files; albeit, image files which have not been archived cannot be deleted. Furthermore, Pavley specifically indicated that images are only taken when there is enough storage space to store a newly captured image. Therefore, Pavley leaves no choice but to disable image capture if the local storage system

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indicates that more storage space is needed to store the newly formed image file when there are no image files that can be safely deleted from the local storage system (e.g. archived images).

20. As for **Claim 14**, Pavley teaches, as shown in figure 2B and as stated in column 3 (line 59), a shutter button (418). Pavley also teaches, as stated in column 5 (line 67) – column 6 (line 10), when there is an attempt to take an image ... the above-recited is performed.

21. As for **Claim 15**, Pavley teaches, as stated in column 5 (line 67) – column 6 (line 10), that above-recited method is based upon determining which previously stored image files can be safely deleted. Therefore, Pavley teaches wherein the method is performed upon completion of an image capture.

22. As for **Claim 17**, Pavley teaches, as stated in column 5 (lines 31 – 45), wherein the archive file attribute is a subset file tags (shown in figures 4 and 5), wherein the file attribute designations are set or reset using designated bits associated and stored with the image file. Therefore, Pavley discloses wherein the step of determining additional image storage capability includes status variables corresponding to each image stored in said memory.

23. As for **Claim 20**, Pavley teaches, as stated in column 5 (lines 39 – 41), that the archive files are image files that have undergone a backup procedure and can be safely deleted from local storage. Furthermore, Pavley teaches, as stated in column 6 (lines 1 – 10), that the archive files are deleted and replaced with newly captured images that have not yet been archived. Therefore, Pavley teach changing a status variable of a replaced archived image to a non-archived status.

24. As for **Claim 21**, Pavley discloses, as stated in column 6 (lines 10 – 17), wherein an archived image comprise a captured image a copy of which has been transferred to an external

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memory connected to said image capture device (The external computer device 1100 is an external memory device).

***Claim Rejections - 35 USC § 103***

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. **Claims 3, 6, 11, 19, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavley.

27. As for **Claim 3**, while Pavley discloses at least one interface (348) communicating with said processor (110) and capable of transferring images out of the image capturing device; Pavley does not disclose wherein said at least one interface is a USB cable interface.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of having a USB cable interface to transferring images are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have a USB cable interface for transferring images for the following advantages: high-speed data transmission, power-supplying capabilities, and convenience.

28. As for **Claim 6**, Pavley discloses, as stated in column 5 (line 67) – column 6 (line 10), wherein said processor is capable of replacing one or more archived images in said memory with a newly captured image when said memory is incapable of storing said newly captured image; although, Pavley does not specify how the replacing is carried out. More specifically, Pavley

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does not teach replacing an oldest image as indicated by a date/time information in a date/time storage cell of a record in the memory.

However, **Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of determining, for purposes of replacement, the oldest image according to stored date/time information associated with a stored image are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to determine, for purposes of replacement, the oldest image according to stored date/time information associated with a stored image for the advantage improving image file inventory control, improving memory management, and reducing processing time.

29. As for **Claims 11, 19, and 22**, while Pavley discloses wherein the transferring step comprises transferring said copy to an external computer device which functions as an external memory device; Pavley does not disclose wherein the transferring step comprises transferring said copy to an external removable memory medium.

However, **Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of transferring a copy of an image out of an image-capturing device to an external removable memory medium are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to transfer a copy of an image out of an image-capturing device to a external removable memory medium as a means to provide a backup copy of the image on a portable permanent mass storage device with device interoperable capabilities.

***Conclusion***

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

31. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David L Ometz can be reached on 571.272.7593. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

April 24, 2006

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER